



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/759,746

01/12/2001

David A. Cathey

92-0466.04

9740

7590

10/20/2004

JAMES R DUZAN
TRASKBRITT PC
P O BOX 2550
SALT LAKE CITY, UT 84110

EXAMINER

PATEL, ASHOK

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,746

Applicant(s)

CATHEY, DAVID A.

Examiner

Ashok Patel

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2879

1. Applicant's arguments filed 07/22/204 have been fully considered but they are not persuasive.
2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 23-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 23 recites the limitation that the doping (impurity) material in the protuberance is greater at the base of the emitter than at the apex. The original disclosure as a whole fails to disclose the claimed limitation, but instead describes a protuberance with the greatest amount of doping at the apex of the emitter that decreases towards a surface of the substrate. Therefore, there does not appear to be sufficient disclosure to

Art Unit: 2879

suggest that the applicant had possession of the claimed material at the time of filing.

The issue of non-enablement is due to the fact that the claimed substrate includes "a planar surface" (in its before manufacturing stage). The substrate in its final product (after undergoing a manufacturing process) has a new surface, which is different from that the claimed planar surface. What planar surface of claims 23, 25 and 27 currently refer to is the original planar surface of the substrate (before undergoing a manufacturing process). After the manufacturing process, the new planar surface of the substrate is formed which is different from the original planar surface and located relatively at a height below the original planar surface. The claimed protuberance having apex is formed on a portion of the (new) planar surface and the claimed concentration of the impurity (i.e. dopant) decreases with a distance from the apex to the new (not the original) planar surface.

4. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2879

The term "the exclusion of said substrate" lacks antecedent basis. The base claim does not mention or define the exclusion of said substrate.

5. Claims 23-30 of this application conflict with claims 14, 19, 20, 21, 23, 28, 31, 34, 35, 38, 40, 42-44, 48 and 62 of U.S. Patent Application S.N. No. 09/609,354. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 2879

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 23-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14, 19, 20, 21, 23, 28, 31, 34, 35, 38, 40, 42-44, 48, 62 of the copending Application No. 09/609,354. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 14, 19, 20, 21, 23, 28, 31, 34, 35, 38, 40, 42-44, 48, 62 of the copending Application No. 09/609,354 recite applicant's claimed pixel or field emission display including a substrate, a micro-cathode including protuberance and a level of impurity or doping or contamination in a varied concentration as recited in instant claims 23-30, as flows:

| <u>Claims of Instant</u> | <u>Claims of the Co-Pending Application</u> |
|--------------------------|--|
| <u>Application</u> | <u>S.N. 09/759,746</u> |
| 23 | 14, 19, 20, 21, 23, 28, 31, 38, 40, 48, and 62 |
| 24 | 14, 19-21, 23, 28, 38, 40, 48, and 62 |
| 25 | 14, 20 and 21 |
| 26 | 14, 20 and 21 |
| 27 | 14 and 20 |
| 28-30 | 28, 34, 35, 40 and 42-44 |

Art Unit: 2879

As to instant claims 28-30, it is known in the art of a display panel or a display device to include the substrate and the micro-cathode or the protuberance as evidenced by the claims 20 and 21 of the co-pending application to produce light from the device.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Miyata et al is cited for showing a general structure of a display panel including emitter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ashok Patel
Primary Examiner
Art Unit 2879